20081211.ba v04_n228.bam.20081211

>From ???@??? Thu Dec 11 00:22:48 2008 -0600
Date: Thu, 11 Dec 2008 00:22:06 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 4228
Message-Id: <20081211062208.32A4210AF9D@srvr1.theporch.com>

BOATANCHORS Digest 4228

Topics covered in this issue include:

1) ER Article on HRO 60
by "Stanley Adams" <stanleybadams@yahoo.com>
2) "Stuff" that needs a new home PLUS the other two posts ... aol strikes again!
by W9MWS@aol.com
3) Anybody Know What's Going On?
by Charles Brenner <cbrenner@charter.net>
4) Looking for SX-101 antenna trimmer knob
by Rodger <wq9e@dtnspeed.net>
5) Re: Free to good home
by Gary Woods <garygarlic@earthlink.net>
6) WTB:nomenclature plate for RCA rcvr. CR-88A
by "Thekan, Paul" <Paul.Thekan@cpii.com>
7) Synchronous detectors - arcane!
by John Sehring <wb0eq@yahoo.com>
8) Re: Synchronous detectors - arcane!
by "Arden Allen" <gumbear@pacbell.net>
9) Re: Synchronous detectors - arcane!
by spr@earthlink.net
10) Re: Synchronous detectors - arcane!
by "Arden Allen" <gumbear@pacbell.net>
11) Is DTV to be believed?
by "Arden Allen" <gumbear@pacbell.net>
12) Re: Is DTV to be believed?
by "Chuck Grandgent" <chuck@chuckg.com>
13) Re: Is DTV to be believed?
by Shriver <shriver1@comcast.net>
14) Re: Is DTV to be believed?
by "K0DAN" <k0dan@comcast.net>
15) Re: Synchronous detectors - arcane!
by John Kolb <jlkolb@jlkolb.cts.com>

From: "Stanley Adams" <stanleybadams@yahoo.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: ER Article on HRO 60

Date: Fri, 5 Dec 2008 15:47:27 -0600
Message-ID: <019501c95723$117c23f0$34746bd0$@com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

Would anyone care to scan and mail to me?

Thanks

Stanley Adams
W4SBA

From: W9MWS@aol.com
Message-ID: <c0a.4e77042c.366b0659@aol.com>
Date: Fri, 5 Dec 2008 17:34:01 EST
Subject: "Stuff" that needs a new home PLUS the other two posts ... aol strikes again!
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----------------------------1228516441"

-------------------------------1228516441
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Initial post:

I'm cleaning out the radio space and workshop and here is a list of some
items that really need a new home.

***** Back Issues of "Electric Radio":
1996: Sep, Nov and Dec
1997: Jan through Dec
1998: Jan through Dec
1999: Jan through Dec
2000: Jan through Dec
2001: Jan through Dec
2002: Jan through Dec
2003: Feb, Mar and Oct
2004: Mar, Jul and Nov

$1.00 per copy or $40 for all plus mail cost.

***** Tubes - Sold as a lot only please. ***THESE ARE SOLD PENDING RECEIPT OF FUNDS***

1 - Western Electric 316A / VT-191 Marked "Navy" - This one is untested and probably is best used as a conversation piece.
2 - RCA / JAN 8025 Untested and I've had them laying around for 20 years.
3 - Mullard 811A Amplifier tubes. Tested Good
1 - GE 811A Amplifier tube - Tested Good
1 - GE 866A Rectifier Tube - Untested.
1 - Sylvania 5R4 GYB - Tested Good. Bought to use in a Collins 516F2 Power supply that's not here any more.
1 - Sylvania 5U4 GB - Tested Good. Bought to use in a Collins 516F2 Power supply that's not here any more.
1 - RCA 5R4 GY - Tested Good. Bought to use in a Collins 516F2 Power supply that's not here any more.
1 - Rogers 5U4 GB - Tested Good. Bought to use in a Collins 516F2 Power supply that's not here any more.
1 - RCA / JAN 815 (VT-287) - Untested. Looks unused but no guarantees.
1 - Amperex 5894 - Original Box and packing. Supposed to be NOS when I bought it 20 years ago but it is untested.
4 - RCA 24A tubes - Tested Good (75%)

Complete lot $50 plus shipping

***** Capacitors
2 Plug in multisection capacitors for R390A PS. Both are in sealed plastic bags I bought them in. They WILL need to be reformed!
    Micamold 3 section cap. Date Code 4-55. Part Number CE53C300N. 3 30 MFD sections at 300 V.D.C
    Sprague 2 section cap. Date Code 2-52. 2 45 MFD sections at 450 V.D.C.

$10 plus mail cost

***** Weston Analyzer model 980 Mark II VOM - Works and looks good. No probes or manual.

$20 plus shipping cost.

***** Antenna Noise Bridge. Omega-T Systems model TE7-01. Works good.

$5 plus shipping cost

***** I also have 4 Tektronix O'Scope Probes. All are used. All need spring tips. All appear to adjust and work when hooked to my Tek 475 scope thru the calibrator and on a 60 Cycle line test. ***SOLD PENDINJG FUNDS***

P 6122 - have 2
P 6231 - have 1
P 6105 - have 1

All 4 for $20 plus shipping

Please contact me off list at: _w9mws at arrl dot net_ (mailto:w9mws@arrl.net)

Thanks es 73 de Mike W9MWS

++
Second Post:

Miessner 15-7511 Wave Trap (13 MC - 27 MC). Balanced or unbalanced line. NOS in the original box with original documentation.

$10 plus mail cost.

Pse contact me off list at w9mws at arrl dot net.

++
Third post:

I just opened a box or amplifier parts ... rf switches, tube sockets, tube caps, coils, bleeder resistor, and some other related items. I will send a picture to interested parties via email so you can see what your buying. $75 plus shipping.

Please contact me off list at w9mws at arrl dot net

thanks and

73 de Mike Stover W9MWS
Fort Wayne, Indiana
Grid Square: EM48ut
Allen County

Hopefully, everything appears in the pass through email this time!

73 Mike W9MWS

**************Make your life easier with all your friends, email, and

favorite sites in one place. Try it now.
(http://www.aol.com/?optin=new-dp&icid=aolcom40vanity&ncid=emlcntaolcom00000010)

```
------------------------------1228516441
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*         ---REMAINDER OF MESSAGE TRUNCATED---           *
*     This post contains a forbidden message format      *
*  (such as an attached file, a v-card, HTML formatting) *
*    Mail Lists at theporch.com only accept PLAIN TEXT   *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * *

------------------------------1228516441--
```

Mime-Version: 1.0 (Apple Message framework v753.1)
Content-Transfer-Encoding: 7bit
Message-Id: <679A89A7-FC3E-4F58-B83D-077344C7C60A@charter.net>
Content-Type: text/plain; charset=US-ASCII; delsp=yes; format=flowed
To: Old Tube Radios <boatanchors@theporch.com>
From: Charles Brenner <cbrenner@charter.net>
Subject: Anybody Know What's Going On?
Date: Sat, 6 Dec 2008 07:11:52 -0600

Hi Gang,

I think everybody on the list is well aware of its requirements to send messages in plain text and the resulting "REMAINDER OF MESSAGE TRUNCATED" warning if you do not do so. A system, by the way, that I support because I think it improves the signal to noise ratio on the list.   I have noticed something curious though and that is there have been occasions when I have received a "truncated" message that others of you have received OK. For example, a week or so ago Jim Garland posted a message about work he was doing of his web site. The message was received here "truncated" yet some of you received it because when you commented on the list about Jim's post you included the text of his original message. Also, on one occasion I posted a for sale item on the list and it came back "truncated" yet I was working on the same computer and browser with the same settings that I had used in the past. I then reposted it and it went through OK. Have others of you noticed this and do you have any idea why it happens? The only possibilities that I can think of is that somewhere along the process the ISP is inserting something that causes the "porch" to go bonkers, or the "porch" is using multiple

servers that have two different versions of filtering software. Just
curious about the situation and wondered what you guys thought.

Chuck Brenner, WB9GJW

Message-ID: <493B0163.4090606@dtnspeed.net>
Date: Sat, 06 Dec 2008 16:49:07 -0600
From: Rodger <wq9e@dtnspeed.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Looking for SX-101 antenna trimmer knob
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

If anyone has a spare antenna trimmer knob for an SX-101 I am looking
for one. This one is an SX-101A but the knob should be the same across
the series and it is probably used on some other Halli receivers. It is
a small knob with a metal skirt marked with dots.

73, Rodger WQ9E

From: Gary Woods <garygarlic@earthlink.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Free to good home
Date: Sun, 07 Dec 2008 14:30:46 -0500
Message-ID: <129oj4hhs8qkijk6drap65usfg728v9sba@4ax.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

On Fri, 05 Dec 2008 14:47:41 -0500, you wrote:

>
>1 TTY polar relay, the big WeCo 8-pin type
>4 octal can type polar relays, Sigma and WeCo- I think these are also for
>TTY use; 3 have removeable covers and look much like the big ones (but
>smaller)

Transformers spoken for; relays still available until my next trash pickup.

Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/6 in upstate New York, 1420' elevation. NY WO G

Content-class: urn:content-classes:message

```
MIME-Version: 1.0
Content-Type: multipart/alternative;
     boundary="----_=_NextPart_001_01C95AD9.0A55D6EC"
Subject: WTB:nomenclature plate for RCA  rcvr. CR-88A
Date: Wed, 10 Dec 2008 07:07:38 -0800
Message-ID:
<15349_1228921658_493FDB3A_15349_3462_1_33AB2CC4117229448172627C308F6E4403A47B69@m
ercury.cpii.com>
From: "Thekan, Paul" <Paul.Thekan@cpii.com>
To: Old Tube Radios <boatanchors@theporch.com>

This is a multi-part message in MIME format.

------_=_NextPart_001_01C95AD9.0A55D6EC
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: quoted-printable
```

=20

=20

I found a nice CR-88A that I'm considering buying but it is missing it's front panel nomenclature plate. It must have been part of a diversity receiving system for the military. Hoping someone might have a junker out there with a name plate they would part with.

=20

Thank you

Paul

N6FEG

____
<html><body><br><br><br><p align=3D"justify">

This message, including any attachments, may include privileged, confidenti=
al and/or inside information. Any distribution or use of this communication=
 by anyone other than the intended recipient(s) is strictly prohibited and =
may be unlawful. If you are not the intended recipient, please notify the =
sender by replying to this message and then delete it from your system.

</p></body></html>

```
------_=_NextPart_001_01C95AD9.0A55D6EC
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*         ---REMAINDER OF MESSAGE TRUNCATED---             *
*     This post contains a forbidden message format        *
*  (such as an attached file, a v-card, HTML formatting)   *
*    Mail Lists at theporch.com only accept PLAIN TEXT     *
* If your postings display this message your mail program  *
* is not set to send PLAIN TEXT ONLY and needs adjusting   *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

------_=_NextPart_001_01C95AD9.0A55D6EC--
```

```
------------------------------
Date: Wed, 10 Dec 2008 11:46:12 -0800 (PST)
From: John Sehring <wb0eq@yahoo.com>
Subject: Synchronous detectors - arcane!
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Message-ID: <762632.22506.qm@web45608.mail.sp1.yahoo.com>
```

Synchronous detectors are vy useful in combating "selective fading" which especially plagues AM signals on HF. The ionosphere wreaks havoc with the amplitude & phase relationships among the sidebands & carrier of a DSB signal. It results in sometimes-terrible post-demodulation distortion. For example, when the carrier fades but the sidebands don't, you can easily get greater than 100% negative modulation at the detector--ugh!

Synchronous detectors are a must to receive Double Side Band Suppressed Carrier signals properly. The receiver must be phase-locked to (i.e. the L.O. or BFO must have the same phase (& amplitude) as the signal's carrier) the incoming signal or else lots of weird distortion results.

This requirement is far beyond what is needed for SSB _voice_ communication--50 Hz is usually close enough and there is no phase-lock requirement.

Anyhow...I've been asked to look for synchronous detector circuits, but only those that use the "2F" method.

Unlike a Phase Locked Loop type of synchronous detector, the 2F circuit generates the "carrier" necessary to correctly reconstruct & demodulate a signal from the whole signal, rather than from just the carrier, whether the signal is full carrier (AM) or suppressed carrier (DSB-SC).

The 2F circuit does this by doubling the _entire_ incoming signal & extracting the necessary info from the whole thing instead of only from the original carrier.

This extraction is done by running the signal thru a non-linear amp (a detector or mixer) to double the frequency of all the signal's components (USB, carrier & LSB), squaring the now frequency-doubled signal (via hard AM limiting), & using this now-square wave to drive a divide-by-2 counter to get back the original-frequency carrier, with its phasing intact. This is then applied to a balanced modulator for the actual signal demodulation.

The circuit can demodulate AM, DSB & FM. Interestingly, the Costas loop, which looks completely different from the 2F circuit, does equivalently the same thing.)

Conceivably, I think that this type of demodulator could work with a DSB signal having a completely suppressed carrier, e.g. generated that way or because of selective fading. There is no need to wait for a PLL to lock, after, say, a complete carrier fade, which always takes a finite amount of time. (Generally, there is an inverse trade off between loop lockup time vs. its spectral impurity, i.e. phase noise.)

I have only one reference in my files for a 2F-type circuit, from Ham Radio magazine, 3/80, "Auto product detection of double sideband" by HF Priebe, K4UD (and letter followup in 10/80 Ham Radio).

I also have a reference from Rhode, Whitaker & Bucher's "Communications Receivers" (2nd ed. 1997) on p. 466 (yes, Rhode is a ham): Lindsey & Simon, "Communication Systems Engineering", Prentice-Hall, 1973. I'm guessing the latter has some circuit details on a 2F design. Does anyone know?

I seem to recall something about this in QST in the last 25 years or so but don't have it in my collection. Anybody willing to tickle their memory cells?

These kinds of circuits have been around since the early 50s so they qualify as BA stuff. Costas wrote about it in 1956, the semi-famous "Costas loop". G.E. was competing with its DSB system against Collins with SSB for military contracts. G.E. designed the AN/FRR-48 (XW-1...did any of these survive?) synchronous receiver during this competition; I think there was also an outboard DSB adaptor as well--YRS-1(?). We know of course who won. I think Costas was ahead of his time.

In retrospect, DSB had some advantages over SSB. It is a form of spread spectrum signal as the two sidebands carry exactly the same information, so there is inherent redundancy & diversity; synchronous detection gives some QRN & QRM immunity; a DSB transmitter is much simpler than an SSB transmitter but the DSB system complexity is then shifted to the receivers which were very much more complicated. PLLing with filamentarian devices is not trivial! I am forced to be thankful for IC PLL chips.

Thanks vy much!

--John WB0EQ/VE6

```
Message-ID: <001d01c95b07$f4b43800$639e480c@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Synchronous detectors - arcane!
Date: Wed, 10 Dec 2008 12:41:48 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
```

> Synchronous detectors are vy useful ....

Too me it's pretty much moot anyway. Today's content is political, religeous and commercial propaganda if not downright pornograpy. What the "communications revolution" has wrought for broadcasting. Person-to-person communications is now the leading contender for bandwidth usage (cell phones, internet, etc.). Digital radio and television is just technolgically upgraded wasteland. Only thing left of value, IMO, is the low end of the FM band.

Arden Allen
KB6NAX

```
Message-ID: <29970452.1228942336839.JavaMail.root@mswamui-
thinleaf.atl.sa.earthlink.net>
Date: Wed, 10 Dec 2008 12:52:16 -0800 (GMT-08:00)
From: spr@earthlink.net
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Synchronous detectors - arcane!
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit
```

Arden,

Au contraire! You need e better radio and antenna, but from 6-8AM PST I can get the BBC or 9740 KHz, not very strong but listenable with the Good Stuff-SX-42, SP-600, sorry, not with an S-38.

```
Besides the BBC< not much.

/scott

-----Original Message-----
>From: Arden Allen <gumbear@pacbell.net>
>Sent: Dec 10, 2008 12:41 PM
>To: Old Tube Radios <boatanchors@theporch.com>
>Subject: Re: Synchronous detectors - arcane!
>
>> Synchronous detectors are vy useful .........
>
>Too me it's pretty much moot anyway.  Today's content is political,
>religeous and commercial propaganda if not downright pornograpy.  What the
>"communications revolution" has wrought for broadcasting.  Person-to-person
>communications is now the leading contender for bandwidth usage (cell
>phones, internet, etc.).  Digital radio and television is just
>technolgically upgraded wasteland.  Only thing left of value, IMO, is the
>low end of the FM band.
>
>Arden Allen
>KB6NAX
>

------------------------------
Message-ID: <001701c95b17$04b2ec60$179f480c@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Synchronous detectors - arcane!
Date: Wed, 10 Dec 2008 14:31:11 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="UTF-8"
Content-Transfer-Encoding: 7bit

> Besides the BBC< not much.

And to think the BBC is a state run operation....

Arden Allen
KB6NAX

------------------------------
Message-ID: <001001c95b3a$3e14a160$949d480c@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Is DTV to be believed?
```

Date: Wed, 10 Dec 2008 18:42:51 -0800
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

I'ts way off topic but I want to ask someone who can give me a cogent answer and if one is available from a List member it probably doesn't exist anywhere else. I just bought a couple of DTV converter boxes and I get good reception from a PBS station, line of sight, strong and noise free on analog so I suspect the problem has nothing to do with signal strength or quality. I purchased a couple of Zenith DT901 boxes which get good reviews. While watching I often get pixels, very annoying. They most often occur with scene changes and it takes about a half second or less for the processing to finish making a whole picture. But when the scene is busy with activity, especially when the screen is full of activity, like a bunch of show girls doing there thing, pixels up the ying-yang.

Is this cuz the program material is sub par for what DTV is supposed to provide?

Is it because the Zenith box is not so hot?

Is it because the station equipment is Wal-Mart from China quality?

Or is it because DTV is a technical flopperoooooo?????

Arden Allen
KB6NAX

Message-ID: <a913924b0812101847p1530d34aibd76dc1a1320c2ea@mail.gmail.com>
Date: Wed, 10 Dec 2008 21:47:03 -0500
From: "Chuck Grandgent" <chuck@chuckg.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Is DTV to be believed?
Cc: "Old Tube Radios" <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

I have been getting DTV OTA here near Gainesville, FL (over the air) for just about a couple years now, and never this pixelation problem. If I had to guess, my guess would be the Zenith box is not so hot.

Chuck, K1OM

On Wed, Dec 10, 2008 at 9:42 PM, Arden Allen <gumbear@pacbell.net> wrote:

> I'ts way off topic but I want to ask someone who can give me a cogent answer and if one is available from a List member it probably doesn't exist anywhere else. I just bought a couple of DTV converter boxes and I get good reception from a PBS station, line of sight, strong and noise free on analog so I suspect the problem has nothing to do with signal strength or quality. I purchased a couple of Zenith DT901 boxes which get good reviews. While watching I often get pixels, very annoying. They most often occur with scene changes and it takes about a half second or less for the processing to finish making a whole picture. But when the scene is busy with activity, especially when the screen is full of activity, like a bunch of show girls doing there thing, pixels up the ying-yang.
>
> Is this cuz the program material is sub par for what DTV is supposed to provide?
>
> Is it because the Zenith box is not so hot?
>
> Is it because the station equipment is Wal-Mart from China quality?
>
> Or is it because DTV is a technical flopperoooooo?????
>
> Arden Allen
> KB6NAX

Message-ID: <49408A70.20100@comcast.net>
Date: Wed, 10 Dec 2008 22:35:12 -0500
From: Shriver <shriver1@comcast.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: gumbear@pacbell.net
Subject: Re: Is DTV to be believed?
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 7bit

Probably means your error rate on the data received from the station is rather high. When the missed frames aren't too important, you don't notice the blocking up. When there's a lot of change, you really notice it, since you need more of the information.

The way DTV works is that a periodic master frame (complete dump) is sent. In between, they send update data, that selectively updates parts of the total picture, like where things are changing (mouths, etc.). If you drop update data, you get minor errors. Drop parts of a master frame, and you have to wait for the next one. You get a "partial" jump cut.

They do use forward error correction, so that some errors in reception can be corrected. (CDs would not work without forward error correction.)

You need a better antenna. More gain, or maybe also less mutlipath -- 8VSB doesn't really like multipath (ghosts in analog).

The box with more errors probably has a poorer sensitivity in the tuner.

There's no question even really clean DTV can get that blocking-up. It's quite possible to have a scene that has more motion than is being allocated to the program. For instance, a pan across a crowd at a ball game, things get a little blocky, but only if you look very closely. In ball games, better to have the ball travel across the image, than to pan and follow the ball. The traveling ball just needs the update frames to be updated. The panning crowd waits for master frames.

Of course, the broadcaster may be choosing to give very little bandwidth to the channel you are watching, and you're seeing what any DTV would see. That lets the broadcaster squeeze more programs in one 6 MHz channel.

That's also how DirectTV has so many more channels than cable. They over-compress them to hell.

Over-the-air DTV does work. But many situations will demand something better than rabbit ears.

Good site for researching the "right" HDTV antenna is http://www.antennaweb.com . It gives you the type of antenna, and the bearing to the station.

However, what it doesn't tell you about is the frequency and transmitter jumps that will happen in February when the analog transmitters (normally higher powered) switch to digital. For instance, here in the Boston area, channel 2 is abandoning it's old frequency, and will move to channel 19's frequency. But it will still say "channel 2" in the data stream. Sadly, channel 4 will stick to it's existing frequency, they are currently on channel 30 for digital. This means that folks who want antennas for HDTV over-the-air need one that includes the VHF low band (channels 2-4), which makes the antenna much larger.

It would be wise to find out what the final frequency assignments in your area will be. There are websites with this information. Hopefully you will only need VHF high band and UHF. Makes the antenna smaller and more durable.

-- John Shriver

>
>
>

Message-ID: <05a801c95b4c$aa833f20$6601a8c0@K0DAN>
From: "K0DAN" <k0dan@comcast.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <boatanchors@theporch.com>
Subject: Re: Is DTV to be believed?
Date: Wed, 10 Dec 2008 22:53:55 -0600
MIME-Version: 1.0
Content-Type: text/plain;
format=flowed;
charset="Windows-1252";
reply-type=original
Content-Transfer-Encoding: 7bit

Hi Arden...

I bought a WalMart Cheapo China box (and RCA? they're probably all the same?) with my gummint check.

It works great...

I don't have one of those fancy "digital antennas" they say you need (haha), I have the same old wierd TV yagi/log which is pointed kind of between all the local broadcast towers. No rotator on the TV antenna. I'm on the south end of the Kansas City area and all the broadcasters are north of me, but all spread out approx 60 degrees, so I just point the antenna somewhere in the middle and hope for the best. This approach has worked OK for analog (some noise/snow/ghosting, but nothing terrible), and is spectacular for digital. Whatever CODEC's & error correction they're using for digital really works well.

All the stations I mention are around 10-15-20 miles line of sight. I'm on somewhat high ground, but no mountanitop. I receive about 15% more channels in digital...like cities out of my metro area, and out of the bore-sight of my antenna. While I'm sure height + gain + SNR all help, my impression is the digital signal processing can really make a modest signal into a hi-def audio-video experience. As with all digital RF, I'm sure there's a point where the bit error rate gets so high that things stop working.

I wonder if this is what's going on in your case? I have seen ZERO pixellation, or frame lockups, but as I said, I've got some degree of antenna gain (oh yes, I do have a preamp in the line), and I'm 10-30 miles from the tower as the crow flies. But I do get some decent signals that are maybe 40-50 miles. Hell, it's DX.

If you're getting good analog, and the transmitter is at the same site, I think something's rotten...either your new converter, maybe the interconnect cables (try RG6 throughout), connectors, a switch or splitter (be sure any splitters/combiners can do the frequency bandpass).

The way you describe your pixel problem suggests to me you're right at the bleeding edge of SNR (bit error rate). Which suggests signal problem (cable, connectors, etc.). Why things are good with analog and not digital, is a mystery, but I'm sure therein lies the answer. The output of the cheap (free!) converters is VERY good..so much so, if you can see/hear a snowy analog signal, it should be dead full quieting on digital...so that's what to pursue. Even if the box is from WallyWorld.

Good luck & 73
Dan
K0DAN

----- Original Message -----
From: "Arden Allen" <gumbear@pacbell.net>
To: "Old Tube Radios" <boatanchors@theporch.com>
Sent: Wednesday, December 10, 2008 8:42 PM
Subject: Is DTV to be believed?

> I'ts way off topic but I want to ask someone who can give me a cogent
> answer
> and if one is available from a List member it probably doesn't exist
> anywhere else. I just bought a couple of DTV converter boxes and I get
> good
> reception from a PBS station, line of sight, strong and noise free on
> analog
> so I suspect the problem has nothing to do with signal strength or
> quality.
> I purchased a couple of Zenith DT901 boxes which get good reviews. While
> watching I often get pixels, very annoying. They most often occur with
> scene changes and it takes about a half second or less for the processing
> to
> finish making a whole picture. But when the scene is busy with activity,
> especially when the screen is full of activity, like a bunch of show girls
> doing there thing, pixels up the ying-yang.
>
> Is this cuz the program material is sub par for what DTV is supposed to
> provide?
>
> Is it because the Zenith box is not so hot?
>

> Is it because the station equipment is Wal-Mart from China quality?
>
> Or is it because DTV is a technical flopperoooooo?????
>
> Arden Allen
> KB6NAX
>
>

Date: Wed, 10 Dec 2008 22:23:40 -0800
To: Old Tube Radios <boatanchors@theporch.com>
From: John Kolb <jlkolb@jlkolb.cts.com>
Subject: Re: Synchronous detectors - arcane!
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed; x-avg-checked=avg-ok-136CF17
Message-Id: <20081211062150.F236A8881@ocean.concentric.com>

I owned both a FRR-48 and a YRS-1 (think that's the right name) back in the '70's.
Seller of the FRR-48 said it was one of only two made. Never could get either one working.
Don't remember now if I sold the FRR-48 or disassembled it, but I do still have the main tuning
knob. Most likely sold it - otherwise I would still have the manual.

John

At 11:46 AM 12/10/2008, you wrote:

>These kinds of circuits have been around since the early 50s so they
>qualify as BA stuff. Costas wrote about it in 1956, the semi-famous
>"Costas loop". G.E. was competing with its DSB system against
>Collins with SSB for military contracts. G.E. designed the
>AN/FRR-48 (XW-1...did any of these survive?) synchronous receiver
>during this competition; I think there was also an outboard DSB
>adaptor as well--YRS-1(?). We know of course who won. I think
>Costas was ahead of his time.

--
Internal Virus Database is out-of-date.
Checked by AVG.
Version: 7.5.549 / Virus Database: 270.8.4/1749 - Release Date: 10/27/2008 7:57 AM

End of BOATANCHORS Digest 4228
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